AMENDMENT AND PRESENTATION OF CLAIMS

Please replace all prior claims in the present application with the following claims, in which claim 19 is canceled without prejudice or disclaimer, claims 1, 9, 14, 20, 22 and 23 are currently amended.

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1. (Currently Amended) A probing router, comprising:

a routing engine forwarding a data packet including user data to a destination node of a communications network, wherein the data packet traverses a particular connectionless communication path among a plurality of connectionless communication paths to the destination node; and

a probe mechanism generating and sending a probe message over the particular connectionless communication path traversed by the data packet for determination of statistics of the communications network with respect to the data packet.

2. (Previously Presented) The probing router of Claim 1, wherein the probe message is sent at time T1 and said probe mechanism receives a reply probe message at a second time, T2, sent by the destination node in response to receiving said probe message with a remote latency indicator therein so that service level agreement characteristics may subsequently be derived by comparing T1, T2 and the remote latency indicator.

3. (Previously Presented) The probing router of Claim 2, further comprising:

a memory storing the service level agreement characteristics identified by the probe mechanism.

4. (Previously Presented) The probing router of Claim 1, wherein the particular connectionless communication path supports a tunnel channel in a virtual private network.

5. (Previously Presented) The probing router of Claim 2, wherein said reply probe message includes a data field specifying the remote latency indicator that represents an amount of time between when said destination node received said probe message and when said destination node sent said reply probe message.

6. (Previously Presented) The probing router of Claim 1, wherein a polling interval at which said probe mechanism sends said probe message is programmable.

7. (Previously Presented) The probing router of Claim 3, wherein said probe mechanism sends at least one of T1, T2, and the remote latency indicator to a probe poller device that calculates service level agreement statistics.

8. (Previously Presented) The probing router of Claim 7, wherein said probe mechanism calculates service level agreement statistics based on T1, T2, and the remote latency indicator, said service level agreement statistics including at least one of a network availability statistic and a packet loss rate.

9. (Currently Amended) A computer-readable medium carrying one or more sequences of one or more instructions for sending a probe message, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

generating a probe message to determine performance statistics relating to transmission of

a data packet including user data over a connectionless communication path; and

sending said probe message over the connectionless communication path among a

plurality of connectionless communication paths to a destination node that is reachable by any

one of the plurality of connectionless communication paths.

10. (Original) The computer-readable medium according to Claim 9, wherein the probe

message includes a time stamp, T1, representing when said probe message is sent in said sending

step.

11. (Previously Presented) The computer-readable medium according to Claim 10,

wherein when the one or more instructions are executed by the one or more processors cause the

one or more processors to further perform the steps of:

receiving at a second time, T2, a reply probe message sent from the destination node; and

extracting a remote latency indicator from said reply probe message, said remote latency

indicator representing an amount of time between when said destination probing router received

said probe message and when said destination node sent said reply probe message.

12. (Previously Presented) The computer-readable medium of Claim 11, wherein when

the one or more instructions are executed by the one or more processors cause the one or more

processors to further perform the step of:

calculating service level agreement statistics associated with the particular connectionless

communication path based on T1, T2, and said remote latency indicator.

13. (Previously Presented) The computer-readable medium of Claim 9, wherein the plurality of connectionless communication paths is supported by a virtual private network.

14. (Currently Amended) A communication system for gathering traffic statistics, comprising:

a probe poller processor receiving performance statistics information relating to transmission of a packet, the performance statistics information being collected by a probing router that generates and sends a probe message over a connectionless communication path that transports the packet to a destination node that is reachable by any one of the plurality of connectionless communication paths; ~~and~~

a virtual private network builder receiving topology information regarding an assignment of probing routers to a virtual private network and produce a control signal to be distributed to respective probing routers, said probing router being one of said probing routers; and

a reporting mechanism, coupled to said probe poller processor, presenting a compilation of said performance statistics information for comparison against performance thresholds of a service level agreement.

15. (Previously Presented) The system of Claim 14, wherein the plurality of connectionless communication paths is supported by a virtual private network.

16. (Previously Presented) The system of Claim 14, wherein said probing router is located within a customer premise.

17. (Previously Presented) The system of Claim 14, wherein said reporting mechanism reports said performance statistics information in at least one of a printed form and a graphically displayed form.

18. (Previously Presented) The system of Claim 14, wherein said reporting mechanism reports said performance statistics via a web interface.

19. (Canceled)

20. (Currently Amended) The system of Claim ~~19~~ 14, wherein said control signal includes a polling interval indicator that sets a polling interval at which said probing router sends said probe message.

21. (Previously Presented) The system of Claim 14, wherein said probe poller processor calculates at least one of an availability and a packet loss rate of the connectionless communication path from said performance statistics information.

22. (Currently Amended) A probing router, comprising:

means for routing data packets including user data to a destination router reachable over a plurality of connectionless communication paths within a virtual private network; and

means for generating and sending a probe message over one of the plurality of connectionless communication paths to the destination router to determine delay experienced by the data packets, the one connectionless communication path transporting the data packets.

23. (Currently Amended) A method for collecting network performance statistics, comprising the steps of:

generating a probe message for determining propagation time associated with transmission of a data packet <u>including user data</u> to a predetermined location; and

sending said probe message over a connectionless communication path that transports the data packet among a plurality of connectionless communication paths of a network, wherein the predetermined location is reachable via any one of the plurality of connectionless communication paths, wherein the propagation time is measured based on a reply message to the probe message.

24. (Previously Presented) The method claim 23, wherein the probe message is generated according to an Internet Protocol, and the plurality of connectionless communication paths are established between a source router and a destination router that is associated with the predetermined location.

25. (Previously Presented) The method claim 24, wherein the probe message and the reply message transmissions are based on a common source IP address and destination IP address that identifies the connectionless communication path that transports the data packet.

26. (Previously Presented) A method for gathering traffic statistics, the method comprising:

receiving performance statistics information relating to transmission of a packet over a virtual private network to a destination node, the performance statistics information being collected by one of a plurality of probing routers, the one probing router sending a probe message over a connectionless communication path that transports the packet to the destination node that

is reachable by any one of the plurality of connectionless communication paths within the virtual private network;

presenting the performance statistics information for comparison against performance thresholds of a service level agreement; and

receiving topology information regarding an assignment of the probing routers to the virtual private network, wherein a control signal is distributed to the respective probing routers.